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Smart Homes - Automation for Buildings

HERMES 101

Installation and User Manual

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Panayotis Foudopoulos
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DESCRIPTION

Knowing the Product

Thank you for choosing **HERMES 101**. This product is a unique bidirectional channel, a serial communication bridge covering an important gap in the market of building automation, the bidirectional connection between two leading products:

- The central **HAI** Controller (Home Automation, Inc), Omni Series (LT, IIe or Pro II*) and
- The central **DUPLINE** board (Carlo Gavazzi), type Modbus Master Module or
  The central **DUPLINE** board (Carlo Gavazzi), type Master Generator G3800 0016**

*With Omni firmware version 3.2 or higher

Necessary, **only if Dupline analog signals are used as well

Supportive Operations

HERMES 101 supports the following operations:

- Lighting zones for dimming control
- Lighting or appliances zones for ON/OFF control
- Motors (motorized roller blinds, garage doors, electric vertical blinds, etc.)
- Buttons of the Dupline bus network for activating programmable operation at the Omni network
- Dupline scenarios activated by the program at the Omni network

Communication Zones

When connected to a Dupline board, HERMES 101 supports a large number of communication zones, covering all the electrical load types in a building. For big installations and wherever a larger number of lighting zones, motors, scenarios, etc. is to be used, HERMES 101 can be connected with up to four Dupline boards, expanding, by far, the overall automation of the building:

- With 1 Dupline board, 128 communication zones can be obtained
- With 2 Dupline boards, 256 communication zones can be obtained
- With 3 Dupline boards, 384 communication zones can be obtained
- With 4 Dupline boards, 512 communication zones can be obtained

Note: *The above count includes all the communication forms that HERMES 101 supports, i.e. lighting, motors, scenarios and buttons. You can find more detailed information regarding the supported communication zones per load type, in APPENDIX B.*

Communication between Omni Controller and Dupline board

The communication between Omni Controller and Dupline board is carried out through their serial ports, using the cables provided with HERMES 101.

Stand-Alone Operation

A very important characteristic of HERMES 101 is its ability to maintain the Dupline network in **full functionality** with the presence of a **modbus master module** even if the HAI Omni network is out of use, e.g. for technical maintenance. In other words, the presence of a **master generator** is not obligatory for achieving this stand-alone operation of the Dupline bus network.

Package Contents

Before you continue with the installation of the product be sure that the following items are included in the provided package. If any of the items is missing or damaged, please, contact your dealer.

- 1 x product **HERMES 101** in metallic cover:

view1

View1

- OMNI port (RJ11 connector), for connecting to the Omni Controller
- DUPL port (RJ11connector), for connecting to the Dupline board

View2

view2

- Power Supply plug 12V DC
- Ethernet network port (RJ45 connector) for future upgrades
- Aperture Button RST (restart button)
- Red color LED (normal operation indicator

- 1 x cable «RJ11 to RJ11» for connecting HAI Omni (FHTC-RJ4)

- 1 x cable «RJ11 to DB9» for connecting Dupline (FHSC-DMM9)

- 1 x power supply 12VDC/1000mA

- 1 x template (pattern) for the fixation of the product

- This Installation and User Manual

INSTALLATION

How to Connect

1. Connect the telephone cable (RJ11 to RJ11) to the OMNI port of HERMES 101 on one side and to an RJ11 serial port of Omni on the other side.

Tip: *Keep a note of the Omni serial port number you have used for this connection. You will need it at the next paragraph, «Communication Settings»*

2. **Case A:** If you use a **Dupline master module,** connect the serial cable (RJ11 to DB9) to the port **DUPL** of HERMES 101 on one side and to the serial port **DB9** of master module on the other side.

   Case B: If you use a **Dupline master generator G3800 0016**, you will need a different serial cable, which is not included in the standard package (it is provided as optional with material code FHSC-DMG16). You can, also, do it yourself, following the connectivity instructions you will find in the last page of this manual.

3. Check connections again, very carefully. If they are all ok, connect the 12VDC/1000mA power supply.

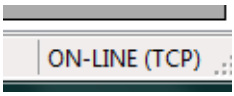
Initial Communication and Configuration

The initial communication and configuration of HERMES 101 can be done in **two different modes**:

- Using the special HAI programming software, **Dealer PC Access** or
- Using an Omni keyboard (**Omni Console**)

Mode 1: Using Dealer PC ACCESS (in two phases)

Connect to the Omni PC Access through Ethernet or Modem connection, following the instructions of the manufacturer. (The «ON-LINE» indication at the bottom right part of PC Access screen, confirms correct communication).



Phase 1: At Dealer PC Access

1. Press "Setup",
2. Press "Units",
   From the expanding options to the right, select the first unit of the first group of 16 units.
3. From the column "House Code Format", select "Centralite". You can see that the option "Centralite" is automatically installed at all 16 units.

   Repeat using the same option ("Centralite" at "House Code Format"), for every group of 16 units you wish to control in the building.

Phase 2: At Dealer PC Access

1. Press "Setup",
2. Press "Expansion" then "Serial",
   From the expanding options to the right, for the serial port where HERMES 101 is connected, choose rate 9600 and function "Centralite".

Mode 2: Using Omni Console keyboard (in two phases)

Phase 1: At the Omni Console keyboard

1. Press the key 9 (=SETUP),
2. Press the key 6 (=MISCELLANEOUS),
3. Using the arrows, go to the "HC1 FORMAT" option,
4. Press the key #,
5. Insert the value of 6 (=CENTRALITE)

   Repeat steps 1 to 5, for the options "HC2 FORMAT", "HC3 FORMAT", etc. for every group of 16 lighting zones you wish to control and the used Omni can support.
6. Press the key #,
7. Press the key * (for returning to the SETUP list)

Phase 2: At the Omni Console keyboard

1. Press the key 9 (=SETUP),
2. Press the key # (=INSTALL),
3. Select 7 (=EXPANSION),
4. Using the arrows, go to the option "SERIAL 1 RATE" or "SERIAL 2 RATE" or "SERIAL 3 RATE" etc. (according to the Omni serial port where HERMES 101 is connected),
5. Press the key #,
6. Insert the value of 8 (=9600 BAUD),
7. Press the key #,
8. Press down arrow to reach the option "SERIAL 1 FUNCTION" or "SERIAL 2 FUNCTION" or "SERIAL 3 FUNCTION" etc. (according to the Omni serial port where HERMES 101 is connected),
9. Press the key #,
10. Insert the value of 9 (=CENTRALITE),
11. Press the key #
12. Press * twice (to return to the SETUP list)
13. Press * (to return to the Initial Screen of the Omni keyboard)

Basic Programming

Omni & Dupline

Omni

On the Omni side, for operations with Units like On, Off, Toggle, Timer and Light Levels, no other adjustment or programming is needed.

For the operations with motors, like motorized blinds, garage doors, electric vertical blinds, etc., a very basic programming is needed. The same is also applied for the opposite communication, i.e. for programming Omni operations activated by buttons of the Dupline network.

Dupline

On the Dupline side a simple addressing is needed. This can be done using the hand tool **GAP 1605** or **BGP-COD-BAT** Programming Unit while the control of all operations is done using the hand tool **GTU8** or **BGP-TEST-SP** Test Unit.

Load Types

Omni Units: DIMMERS and ON-OFF

These are Omni network elements representing lighting zones or appliances and using Dupline addresses of the group «**Dimmers**» and «**On-Off**» (see Appendix A)

The **OMNI Units** are automatically mapped to Dupline addresses by HERMES 101. Some of these addresses correspond to operations On/Off while some others correspond to Dimmer operations (see Appendix A).

OPERATION: From the Omni side you can send On, Off, Toggle and Timer commands while concerning the dimmers, the light level commands are supported as well. All five preset light level commands accepted by Dupline are supported, i.e. the levels 0%, 25%, 50%, 75% and 100%. On the side of the Dupline network, you can assign the Dupline address you have chosen for the lighting zone to one of the inputs of a Dupline input module as you always do in a Dupline network, and connect this input to a momentary switch (button).

Omni Motors

These are Omni network elements using addresses of the group **"Motors"** (see Appendix A, column "Roller blinds").

The **motors** are automatically mapped to Dupline addresses by HERMES 101 and, as motors need two commands (e.g. Roller blind Up/ Roller blind Down), you will **always** use two **successive** numbers of Centralite scenes in order to generate the commands for these movements (see Appendix A).

OPERATION: From the Omni side you can send a command picked up from a pair of Centralite scenes. The first number of a pair of Centralite scenes, when set to **ON**, **always** controls the command **UP** while the second number of the same pair of scenes, when set to **ON**, **always** controls the command **DOWN**. On the Dupline network side you act accordingly if the Dupline board is a **master module** or a **master generator G3800 0016**:

- If you use a **master module** board then assign two addresses of Starlite buttons (see below) to two inputs of a Dupline input module (coupler) and program their operation on Omni.
- If you use a **master generator G3800 0016** board then assign the two Dupline addresses of the pair of scenes you have selected from the Appendix A to two inputs of a Dupline coupler.

Example: *From the Appendix A select the Roller blind No 6.*

*You can see that the command «Roller blind **Up**» corresponds to the Centralite scene **11** and the command «Roller blind **Down**» to the Centralite scene **12**.*

*Respectively, the Dupline addresses for the same Roller blind are **K3** for the «Roller blind **Up**» and **K4** for the «Roller blind **Down**».*

Operation of Motors per Dupline Network Type

Depending on the used Dupline type the operation with motors is distinguished in two categories:

Category I: OMNI motors with modbus master module

- If you set the **1st** scene number of a Centralite scene pair to **ON**, then the motor starts moving **upwards**.
- If you set the **2nd** scene number of a Centralite scene pair to **ON**, then the motor starts moving **downwards**.
- If you set the **1st** scene number of a Centralite scene pair to **OFF**, then the motor stops moving, no matter if it was moving **upwards** or **downwards.**

Category II: OMNI Motors with master generator G3800 0016

- If you set the **1st** scene number of a Centralite scene pair to **ON**, then the motor starts moving **upwards**.
- If you send the same movement command for a second time (**upwards** in our example) then the motor stops.
- If you set the **2nd** scene number of a Centralite scene pair to **ON**, then the motor starts moving **downwards**.
- If you send the same movement command for a second time (**downwards** in our example) then the motor stops.

Note: *As Omni does not support any operation for recognizing information regarding the status of Centralite scenes (as it does for Units), if you want to control the status of a motor by programming then using Omni flags is recommended.*

Starlite Buttons

These are Dupline network buttons using addresses of the group **"Starlite buttons"** (see Appendix A).

Starlite buttons are automatically mapped by HERMES 101 and sent to the Omni network as type **Starlite2** buttons of **Omni units**.

OPERATION: Their basic characteristic is that though residing in the Dupline network as physical buttons, they can be used as triggers to start Omni **programming lines** in order to execute any operation available at Omni.

Notes for the Omni programming lines:

1. *Programming lines at an Omni network refer to commands, Units, Temperature Zones, Flags, or anything else the Omni allows you to program.*
2. *Type Starlite 2 buttons of Omni Units take their names automatically from the corresponding Omni Unit but they have no effect on this Unit. What they will do depends only on what you will program at the Omni.*

Omni Scenarios - Centralite scenes

These are Dupline network buttons using addresses of the group **"Scenarios"** (see Appendix A).

Scenarios based on Omni Centralite scenes are automatically mapped by HERMES 101 and sent to the Dupline network as Dupline addresses with momentary switch function.

OPERATION: Each scenario sets the corresponding Dupline address to **ON** instantly and, right afterwards, sets it back to **OFF**.

Note: *Practically, they are used in activating Dupline scenarios written in master generator.*

START-UP

Once the connection and configuration of the OMNI are completed, HERMES 101 is ready for operation. Its full communication is started up automatically after about 60 seconds if using the **master module** and about 7 seconds if using the **master generator G3800 0016.**

From the table of Dupline address distribution per Dupline network node you select all the load types of the building (by order of appearance in Appendix A).

More specifically:

1. The lighting zones with dimming operations (indication "Dimmers")
2. The lighting zones or appliances with switch ON/OFF operations (indication "On/Off")
3. The motors (indication "Roller blinds")
4. The Starlite buttons (indication "Starlite Buttons")
5. The scenarios (indication "Dupline Scenarios")

For each lighting zone, Starlite button number or Omni-Centralite scene scenario, the corresponding Dupline address appears beside.

For each motor **two** Dupline addresses appear beside. The first address is the command for the movement **"UP"** while the right next address is the command for the movement **"DOWN"**.

Important Note for the Installer /Programmer:

It is **necessary** for the project installer/programmer to start programming the system using the Dupline Address **D1** (corresponding to **unit 13** of the Omni) as **first, supplying** a simple load (e.g. an On-Off light), somewhere near and within sight**.**

The above is considered as **extremely important** for the further progress of programming as **D1** is the **basic communication address** between the Omni Controller and the Dupline board.

The correct and smooth operation of this load indicates also correct communication between the Omni Controller and the Dupline board.

MAPPING EXAMPLES between Omni & Dupline "Dimmer" Unit Operations"

With one Dupline node

- The **1st** dimmer corresponds to unit **1** of the Omni and to addresses **A1-A2-A3-A4** of the **1st Dupline**
- The **2nd** dimmer corresponds to unit **2** of the Omni and to addresses **A5-A6-A7-A8** of the **1st Dupline**

.....

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- The **7th** dimmer corresponds to unit **19** of the Omni and to addresses **E5-E6-E7-E8** of the **1st Dupline**
- The **8th** dimmer corresponds to unit **20** of the Omni and to addresses **F1-F2-F3-F4** of the **1st Dupline**

End of 1st Dupline node

With two Dupline nodes

- The **9th** dimmer corresponds to unit **49** of the Omni and to addresses **A1-A2-A3-A4** of the **2nd Dupline**
- The **10th** dimmer corresponds to unit **50** of the Omni and to addresses **A5-A6-A7-A8** of the **2nd Dupline**

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- The **15th** dimmer corresponds to unit **67** of the Omni and to addresses **E5-E6-E7-E8** of the **2nd Dupline**
- The **16th** dimmer corresponds to unit **68** of the Omni and to addresses **F1-F2-F3-F4** of the **2nd Dupline**

End of 2nd Dupline node
etc

For the full mapping list between Omni and Dupline, please, refer to the detailed table of "Appendix B" at the end of this manual.

MAPPING EXAMPLES between Omni & Dupline
"On-Off" Unit Operations

With one Dupline Node

- The **1st** ON/OFF corresponds to unit **5** of the Omni and to address **C1** of the **1st Dupline**
- The **2nd** ON/OFF corresponds to unit **6** of the Omni and to address **C2** of the **1st Dupline**
- The **3rd** ON/OFF corresponds to unit **7** of the Omni and to address **C3** of the **1st Dupline**

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- The **39th** ON/OFF corresponds to unit **47** of the Omni and to address **I7** of the **1st Dupline**
- The **40th** ON/OFF corresponds to unit **48** of the Omni and to address **I8** of the **1st Dupline**

End of 1st Dupline node

With two Dupline Nodes

- The **41th** ON/OFF corresponds to unit **53** of the Omni and to address **C1** of the **2nd Dupline**
- The **42th** ON/OFF corresponds to unit **54** of the Omni and to address **C2** of the **2nd Dupline**
- The **43th** ON/OFF corresponds to unit **55** of the Omni and to address **C3** of the **2nd Dupline**

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- The **79th** ON/OFF corresponds to unit **95** of the Omni and to address **I7** of the **2nd Dupline**
- The **80th** ON/OFF corresponds to unit **96** of the Omni and to address **I8** of the **2nd Dupline**

End of 2nd Dupline node
etc

MAPPING EXAMPLES between Omni & Dupline
"Up-Down" Motor Operations

With one Dupline node

- The **1st** roller blind corresponds to centralites **1 & 2** of the OMNI and to addresses **J1 & J2** of the **1st Dupline**
- The **2nd** roller blind corresponds to centralites **3 & 4** of the OMNI and to addresses **J3 & J4** of the **1st Dupline**

.....
.....

- The **9th** roller blind corresponds to centralites **17 & 18** of the OMNI and to addresses **L1 & L2** of the **1st Dupline**
- The **10th** roller blind corresponds to centralites **19 & 20** of the OMNI and to addresses **L3 & L4** of the **1st Dupline**

End of 1st Dupline node

With two Dupline nodes

- The **11th** roller blind corresponds to centralites **25 & 26** of the OMNI and to addresses **J1 & J2** of the **2nd Dupline**
- The **12th** roller blind corresponds to centralites **27 & 28** of the OMNI and to addresses **J3 & J4** of the **2nd Dupline**

.....
.....

- The **25th** roller blind corresponds to centralites **53 & 54** of the OMNI and to addresses **M5 & M6** of the **2nd Dupline**
- The **26th** roller blind corresponds to centralites **55 & 56** of the OMNI and to addresses **M7 & M8** of the **2nd Dupline**

End of 2nd Dupline node
etc

Note for the Installer / Programmer:

Define the desired times for «Up» & «Down» of every roller blind using auxiliary flags of the Omni within PC Access.

MAPPING EXAMPLES between Omni & Dupline
"Starlite button" operations

With one Dupline node

- The **1st** button is identified as **1st** Omni **Starlite switch type 2** and corresponds to **L5** of the **1st Dupline**
- The **2nd** button is identified as **2nd** Omni **Starlite switch type 2** and corresponds to **L6** of the **1st Dupline**

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.....

- The **31st** button is identified as **31st** Omni **Starlite switch type 2** and corresponds to **P3** of the **1st Dupline**
- The **32nd** button is identified as **32nd** Omni **Starlite switch type 2** and corresponds to **P4** of the **1st Dupline**

End of 1st Dupline node

With two Dupline nodes

- The **33rd** button is identified as **33rd** Omni **Starlite switch type 2** and corresponds to **N1** of the **2nd Dupline**
- The **34th** button is identified as **34th** Omni **Starlite switch type 2** and corresponds to **N2** of the **2nd Dupline**

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.....

- The **51st** button is identified as **51st** Omni **Starlite switch type 2** and corresponds to **P3** of the **2nd Dupline**
- The **52nd** button is identified as **52nd** Omni **Starlite switch type 2** and corresponds to **P4** of the **2nd Dupline**

End of 2nd Dupline node
etc

MAPPING EXAMPLES between Omni & Dupline
"Dupline Scenarios" Operations

With one Dupline node

- The Centralite scene **21** of the Omni performs a push button operation at address **P5** of the **1st Dupline** and activates any scenario written within the master generator for this address.
- The Centralite scene **22** of the Omni performs a push button operation at address **P6** of the **1st Dupline** and activates any scenario written within master generator for this address.
- The Centralite scene **23** of the Omni performs a push button operation at address **P7** of the **1st Dupline** and activates any scenario written within master generator for this address.
- The Centralite scene **24** of the Omni performs a push button operation at address **P8** of the **1st Dupline** and activates any scenario written within master generator for this address.

End of 1st Dupline node

With two Dupline nodes

- The Centralite scene **57** of the Omni performs a push button operation at address **P5** of the **2nd Dupline** and activates any scenario written within master generator for this address.
- The Centralite scene **58** of the Omni performs a push button operation at address **P6** of the **2nd Dupline** and activates any scenario written within master generator for this address.
- The Centralite scene **59** of the Omni performs a push button operation at address **P7** of the **2nd Dupline** and activates any scenario written within master generator for this address.
- The Centralite scene **60** of the Omni performs a push button operation at address **P8** of the **2nd Dupline** and activates any scenario written within master generator for this address.

End of 2nd Dupline node

etc

Note for the operations with HAI scenarios

- *The HAI scenarios have real value only in a connection with a **master generator** and as long as you want to support the activation of scenarios written in it. In the case of a connection to a **modbus master module** the manufacturer recommends programming of scenarios at the Omni.*

APPENDIX A
Mapping between HAI Omni elements and Dupline
1st Dupline node

Dimmers			On-Off			Roller blinds			Starlite Buttons			Dupline Scenarios		
Nr.	Omni Unit	Dupl. Addr.	Nr.	Omni Unit	Dupl. Addr.	Nr.	Omni Centralite Scene	Dupl. Addr.	Nr.	Button	Dupl. Addr.	Nr.	Omni Centralite Scene	Dupl. Addr.
1	1	A1 to A4	1	5	C1	1	1	J1	1	1	L5	1	21	P5
2	2	A5 to A8	2	6	C2		2	J2	2	2	L6	2	22	P6
3	3	B1 to B4	3	7	C3	2	3	J3	3	3	L7	3	23	P7
4	4	B5 to B8	4	8	C4		4	J4	4	4	L8	4	24	P8
5	17	D5 to D8	5	9	C5	3	5	J5	5	5	M1			
6	18	E1 to E4	6	10	C6		6	K3	6	6	M2			
7	19	E5 to E8	7	11	C7	4	7	J7	7	7	M3			
8	20	F1 to F4	8	12	C8		8	J8	8	8	M4			
			9	13	D1	5	9	K1	9	9	M5			
			10	14	D2		10	K2	10	10	M6			
			11	15	D3	6	11	K3	11	11	M7			
			12	16	D4		12	K4	12	12	M8			
			13	21	F5	7	13	K5	13	13	N1			
			14	22	F6		14	K6	14	14	N2			
			15	23	F7	8	15	K7	15	15	N3			
			16	24	F8		16	K8	16	16	N4			
			17	25	G1	9	17	L1	17	17	N5			
			18	26	G2		18	L2	18	18	N6			
			19	27	G3	10	19	L3	19	19	N7			
			20	28	G4		20	L4	20	20	N7			
			21	29	G5				21	21	O1			
			22	30	G6				22	22	O2			
			23	31	G7				23	23	O3			
			24	32	G8				24	24	O4			
			25	33	H1				25	25	O5			
			26	34	H2				26	26	O6			
			27	35	H3				27	27	O7			
			28	36	H4				28	28	O8			
			29	37	H5				29	29	P1			
			30	38	H6				30	30	P2			
			31	39	H7				31	31	P3			
			32	40	H8				32	32	P4			
			33	41	I1									
			34	42	I2									
			35	43	I3									
			36	44	I4									
			37	45	I5									
			38	46	I6									
			39	47	I7									
			40	48	I8									

End of 1st Dupline node

APPENDIX A
Mapping between HAI Omni elements and Dupline 2nd Dupline node

Dimmers			On-Off			Roller blinds			Starlite Buttons			Dupline Scenarios		
Nr.	Omni Unit	Dupl. Addr.	Nr.	Omni Unit	Dupl. Addr.	Nr.	Omni Centralite Scene	Dupl. Addr.	Nr.	Button	Dupl. Addr.	Nr.	Omni Centralite Scene	Dupl. Addr.
9	49	A1 to A4	41	53	C1	11	25	J1	33	33	N1	5	57	P5
10	50	A5 to A8	42	54	C2		26	J2	34	34	N2	6	58	P6
11	51	B1 to B4	43	55	C3	12	27	J3	35	35	N3	7	59	P7
12	52	B5 to B8	44	56	C4		28	J4	36	36	N4	8	60	P8
13	65	D5 to D8	45	57	C5	13	29	J5	37	37	N5			
14	66	E1 to E4	46	58	C6		30	J6	38	38	N6			
15	67	E5 to E8	47	59	C7	14	31	J7	39	39	N7			
16	68	F1 to F4	48	60	C8		32	J8	40	40	N7			
			49	61	D1	15	33	K1	41	41	O1			
			50	62	D2		34	K2	42	42	O2			
			51	63	D3	16	35	K3	43	43	O3			
			52	64	D4		36	K4	44	44	O4			
			53	69	F5	17	37	K5	45	45	O5			
			54	70	F6		38	K6	46	46	O6			
			55	71	F7	18	39	K7	47	47	O7			
			56	72	F8		40	K8	48	48	O8			
			57	73	G1	19	41	L1	49	49	P1			
			58	74	G2		42	L2	50	50	P2			
			59	75	G3	20	43	L3	51	51	P3			
			60	76	G4		44	L4	52	52	P4			
			61	77	G5	21	45	L5						
			62	78	G6		46	L6						
			63	79	G7	22	47	L7						
			64	80	G8		48	L8						
			65	81	H1	23	49	M1						
			66	82	H2		50	M2						
			67	83	H3	24	51	M3						
			68	84	H4		52	M4						
			69	85	H5	25	53	M5						
			70	86	H6		54	M6						
			71	87	H7	26	55	M7						
			72	88	H8		56	M8						
			73	89	I1									
			74	90	I2									
			75	91	I3									
			76	92	I4									
			77	93	I5									
			78	94	I6									
			79	95	I7									
			80	96	I8									

End of 2nd Dupline node

APPENDIX A
Mapping between HAI Omni elements and Dupline 3rd Dupline node

Dimmers			On-Off			Roller blinds			Starlite Buttons			Dupline Scenarios		
Nr.	Omni Unit	Dupl. Addr.	Nr.	Omni Unit	Dupl. Addr.	Nr.	Omni Centralite Scene	Dupl. Addr.	Nr.	Button	Dupl. Addr.	Nr.	Omni Centralite Scene	Dupl. Addr.
17	97	A1 to A4	81	113	I1	27	61	M1	53	53	P1	x	x	x
18	98	A5 to A8	82	114	I2		62	M2	54	54	P2	x	x	x
19	99	B1 to B4	83	115	I3	28	63	M3	55	55	P3	x	x	x
20	100	B5 to B8	84	116	I4		64	M4	56	56	P4	x	x	x
21	101	C1 to C4	85	117	I5	29	65	M5	57	57	P5	x	x	x
22	102	C5 to C8	86	118	I6		66	M6	58	58	P6	x	x	x
23	103	D1 to D4	87	119	I7	30	67	M7	59	59	P7	x	x	x
24	104	D5 to D8	88	120	I8		68	M8	60	60	P8	x	x	x
25	105	E1 to E4	89	121	J1	31	69	N1						
26	106	E5 to E8	90	122	J2		70	N2						
27	107	F1 to F4	91	123	J3	32	71	N3						
28	108	F5 to F8	92	124	J4		72	N4						
29	109	G1 to G4	93	125	J5	33	73	N5						
30	110	G5 to G8	94	126	J6		74	N6						
31	111	H1 to H4	95	127	J7	34	75	N7						
32	112	H5 to H8	96	128	J8		76	N8						
			97	129	K1	35	77	O1						
			98	130	K2		78	O2						
			99	131	K3	36	79	O3						
			100	132	K4		80	O4						
			101	133	K5	37	81	O5						
			102	134	K6		82	O6						
			103	135	K7	38	83	O7						
			104	136	K8		84	O8						
			105	137	L1									
			106	138	L2									
			107	139	L3									
			108	140	L4									
			109	141	L5									
			110	142	L6									
			111	143	L7									
			112	144	L8									

Note: The 3rd Dupline node does not support «scenarios»

End of 3rd Dupline node

APPENDIX A
Mapping between HAI Omni elements and Dupline 4th Dupline node

Dimmers			On-Off			Roller blinds			Starlite Buttons			Dupline Scenarios		
Nr.	Omni Unit	Dupl. Addr.	Nr.	Omni Unit	Dupl. Addr.	Nr.	Omni Centralite Scene	Dupl. Addr.	Nr.	Button	Dupl. Addr.	Nr.	Omni Centralite Scene	Dupl. Addr.
33	145	A1 to A4	113	153	E1	39	85	J1	61	61	L5	9	105	P1
34	146	A5 to A8	114	154	E2		86	J2	62	62	L6	10	106	P2
35	147	B1 to B4	115	155	E3	40	87	J3	63	63	L7	11	107	P3
36	148	B5 to B8	116	156	E4		88	J4	64	64	L8	12	108	P4
37	149	C1 to C4	117	157	E5	41	89	J5	65	65	M1	13	109	P5
38	150	C5 to C8	118	158	E6		90	J6	65	65	M2	14	110	P6
39	151	D1 to D4	119	159	E7	42	91	J7	67	67	M3	15	111	P7
40	152	F1 to F4	120	160	E8		92	J8	68	68	M4	16	112	P8
			121	161	F1	43	93	K1	69	69	M5			
			122	162	F2		94	K2	70	70	M6			
			123	163	F3	44	95	K3	71	71	M7			
			124	164	F4		96	K4	72	72	M8			
			125	165	F5	45	97	K5	73	73	N1			
			126	166	F6		98	K6	74	74	N2			
			127	167	F7	46	99	K7	75	75	N3			
			128	168	F8		100	K8	76	76	N4			
			129	169	G1	47	101	L1	77	77	N5			
			130	170	G2		102	L2	78	78	N6			
			131	171	G3	48	103	L3	79	79	N7			
			132	172	G4		104	L4	80	80	N8			
			133	173	G5				81	81	O1			
			134	174	G6				82	82	O2			
			135	175	G7				83	83	O3			
			136	176	G8				84	84	O4			
			137	177	H1				85	85	O5			
			138	178	H2				86	86	O6			
			139	179	H3				87	87	O7			
			140	180	H4				88	88	O8			
			141	181	H5									
			142	182	H6									
			143	183	H7									
			144	184	H8									
			145	185	I1									
			146	186	I2									
			147	187	I3									
			148	188	I4									
			149	189	I5									
			150	190	I6									
			151	191	I7									
			152	192	I8									

End of 4th Dupline node

APPENDIX B

Operations per **Omni type**

Remarks:

1. The number of the Dupline nodes you need to get the most of every Omni type is analyzed at the following table.

Operations per **Omni Type**

Omni Type	Dimmers	On/Off	Roller blinds	Starlite buttons	Dupline scenarios
LT	4	12	8	16	16
IIe	8	40	24	64	16
Pro II	40	152	24	88	16

Operations per **Dupline Node**

Dupline node	Dimmers	On/Off	Roller blinds	Starlite buttons	Dupline scenarios
1st	8	40	5	32	4
2nd	8	40	8	20	4
3rd	16	32	6	8	0
4th	8	40	5	28	8

Example: For an Omni LT one Dupline node is enough to cover the 4 dimmer zones and the 12 lighting, On/Off zones, but you will need 4 Dupline nodes if you want to activate 16 Dupline scenarios.

2. Each roller blind needs two Starlite buttons (commands "Up" and "Down") decreasing, naturally, the total available number of buttons for other uses.

TROUBLESHOOTING

1 **LED does not light up**
Check the power supply unit. Disconnect the supply plug and verify, using a voltmeter, that the voltage of the power supply unit is 12V. If it is not, replace the power supply unit with a new one of the same specifications (12V, 1000mA).

2 **Omni commands are not executed at the Dupline network** or **the status of the Dupline addresses does not return to the Omni**

- Press the RST key in the aperture using a thin screwdriver, wait one minute and try again.
- Disconnect the power supply from Omni, Dupline, and HERMES 101, wait one minute, reconnect the supply, and try again after one more minute.
- Verify that the telephone and serial cables of HERMES 101 are not damaged.

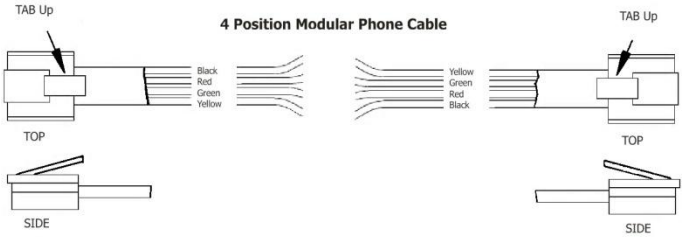
If none of the above solutions resolve the problem, please, contact your dealer.

Technical Characteristics

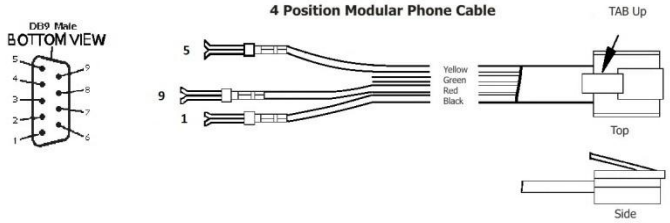
Characteristic	**Value**
Supply Voltage	9-36V DC
Power Consumption	2W max
Dimensions	160 x 120 (mm)
Ethernet Connectivity	10Base-T
Ethernet Port	RJ45
Operating Temperature	-40 to 85° C (-40 to 185° F)
Humidity	5 – 95 %, non condensing

CONNECTION CABLES

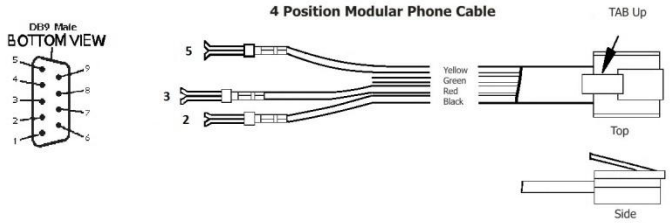
Omni – HERMES101
(FHTC-RJ4)



Dupline modbus master module - HERMES 101
(FHSC-DMM9)



Dupline master generator G3800 0016 - HERMES 101
(FHSC-DMG16)



futurehome.gr
Foinikis 6, 104 43, ATHENS, GR
info@futurehome.gr
21-05157688